

Listing of Claims:

1. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:
 - (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;
 - (b) each coordinate label is unique to the Node to which it is assigned;
 - (c) a path between a first Node and a second, ~~non-adjacent~~ Node that includes at least a third Node between said first Node and said second Node being determined from one of said coordinate labels assigned to said first Node and one of said coordinate labels assigned to said second Node; and
 - (d) said first Node ~~a pair of said Nodes that are connected by said Links~~ stores the set of one or more coordinate labels ~~corresponding to the other Node of said pair of Nodes~~.
2. (Currently amended) The network of claim 1 wherein ~~each~~ said first Node of said pair of Nodes reroutes any data intended for ~~the other~~ said second Node of said pair of Nodes in the event said ~~other~~ second Node of said pair of Nodes moves or fails.
3. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:
 - (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;
 - (b) each coordinate label is unique to the Node to which it is assigned;
 - (c) a path between a first Node and a second, ~~non-adjacent~~ Node that includes at least a third Node between said first Node and said second Node being determined from one of said coordinate labels assigned to said first Node and one of said coordinate labels assigned to said second Node; and
 - (d) at least one of said plurality of Nodes is automatically replicated to create at least one mirror Node.
4. (Original) The network of claim 3 where said at least one mirror Node is mobile.

5. (Currently amended) The network of claim 3 where said ~~replicated Node~~ at least one of said plurality of Nodes that is automatically replicated is mobile.
6. (Currently amended) The network of claim 3 where said ~~replicated Node~~ at least one of said plurality of Nodes that is automatically replicated is a part of the World Wide Web.
7. (Currently amended) The ~~method~~ network of claim 3 wherein a packet is routed to a closest Node of said ~~plurality of mirror Nodes~~ at least one mirror Node.
8. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:
 - (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;
 - (b) each coordinate label is unique to the Node to which it is assigned;
 - (c) a path between a first Node and a second, ~~non-adjacent~~ Node that includes at least a third Node between said first Node and said second Node being determined from one of said coordinate labels assigned to said first Node and one of said coordinate labels assigned to said second Node; and
 - (d) ~~at least one of said plurality of Nodes~~ said first Node automatically creates at least one cache and redirects a data request to said at least one cache.
9. (Original) The network of claim 8 where said at least one cache is mobile.
10. (Original) The network of claim 8 where said at least one cache contains a load from a mobile Node.
11. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:
 - (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;

- (b) each coordinate label is unique to the Node to which it is assigned;
 - (c) a path between a first Node and a second, ~~non-adjacent~~ Node that includes at least a third Node between said first Node and said second Node being determined from one of said coordinate labels assigned to said first Node and one of said coordinate labels assigned to said second Node; and
 - (d) ~~at least one of said plurality of Nodes~~ said first Node is a mobile Node.
12. (Original) The network of claim 11 where said mobile Node is a PDA.
13. (Original) The network of claim 11 where said mobile Node is a cellular telephone.
14. (Original) The network of claim 11 where said mobile Node is a laptop computer.
15. (Original) The network of claim 11 where said mobile Node is a router located on a vehicle.
16. (Currently amended) A method for determining a path from a source Node to a destination Node in a network comprising a plurality of Nodes interconnected by Links, said Nodes including a first Node, and a plurality of second Nodes, said second Nodes including said source Node and said destination Node, said method comprising the steps of:
- (a) assigning to each of said second Nodes, ~~including said source Node and said destination Node,~~ one or more coordinate labels, each coordinate label ~~assigned to a second Node~~ representing a path through said network from one of said plurality of second Nodes to which it is assigned to said first Node;
 - (b) determining a path from said source Node to said destination Node by combining one coordinate label of said source Node and one coordinate label of said destination Node; and
 - (c) at one of said plurality of second Nodes, storing one or more coordinate labels of ~~a another said plurality of second Nodes that is~~ adjacent to said one of said plurality of second Nodes.

17. (Currently amended) The method of claim 16 ~~wherein~~ further comprising, at said one of said plurality of second Nodes, rerouting data intended for said another of said plurality of second Nodes ~~adjacent to said one second Node~~ in the event that one or more Links and/or Nodes between said one of said plurality of second Nodes and said another said plurality of second nodes prevents communication between said one of said plurality of second Nodes and said another said plurality of second nodes ~~said second Nodes adjacent to said one second Node~~ Nodes moves or fails.
18. (Currently amended) A Node for use in a network, said network comprising a plurality of Nodes connected by Links, wherein:
 - (a) said Node for use in said network has one or more coordinate labels assigned ~~thereto to said node~~, each coordinate label representing a path from said Node to a particular other, ~~non-adjacent~~ Node of said network that includes at least a third Node between said first Node and said second Node, each of said coordinate labels being unique to said Node; and
 - (b) said Node stores one or more coordinate labels corresponding to an adjacent Node.
19. (Original) The Node of claim 18 wherein said Node reroutes any data intended for said adjacent Node in the event said adjacent Node is moved to a different location.
20. (Original) The Node of claim 18 wherein said Node reroutes any data intended for said adjacent Node in the event said adjacent Node is unable to receive said packet.
21. (New) The network of claim 1 wherein said first Node reroutes any data intended for said second Node in the event said that one or more Links and/or Nodes between said first Node and said second Node prevents communication between said first Node and said second Node.